Catalogue of American Amphibians and Reptiles.

BLEM, CHARLES R. 1981. *Heterodon platyrhinos.*

Heterodon platyrhinos Latreille
Eastern hognose snake

Heterodon platyrhinos Latreille [Sonnini and Latreille], 1802:32. Type-locality, "vicinity of Philadelphia," designated by Schmidt (1953). No holotype known.

Coluber cacodaemon Shaw, 1802:377. Type-locality "Carolina" restricted to "Charleston, South Carolina" by Schmidt (1953). No holotype known.

Coluber heterodon Daudin, 1803:153. Type-locality, designated as "vicinity of Philadelphia" by Schmidt (1953). No holotype known.

Scytale niger Daudin, 1803:342. Type-locality "Carolina," by implication restricted to "Charleston, South Carolina" by Schmidt (1953). No holotype known.

Coluber thraso Harlan, 1835:120. Type-locality, "Broad River, affluent of the Delaware, Pennsylvania." No holotype known.

Heterodon niger Troost, 1836:186. Type-locality, "Tennessee." No holotype known.

Heterodon annulatus Troost, 1836:188. Type-locality, "Perry County, Tennessee." No holotype known.

Heterodon tigrinus Troost, 1836:189. Type-locality, "Nashville, Davidson County, and Maury County, Tennessee," restricted to "Nashville" by Schmidt (1953). No holotype known.

Heterodon atmodes Baird and Girard, 1853:57. Type-locality, "Georgia" and "Charleston, S.[outh] C.[arolina]," restricted to "Charleston, South Carolina" by Schmidt (1953). Syntypes, U.S. Nat. Mus. 1152–53, Charleston, South Carolina, juvenile and adult female respectively, collected by S. B. Barker, date of collection unknown (not examined by author); U.S. Nat. Mus. 1158, Georgia, adult male, collected by C. B. Adams, date of collection unknown (not examined by author); U.S. Nat. Mus. 1199, Charleston, South Carolina, adult female, collected by C. Girard, date of collection unknown (not examined by author).

Heterodon browni Stejneger, 1903:123. Type-locality, "Lemon City [now Miami], Dade County, Florida." Holotype, U.S. Nat. Mus. 32089, juvenile female, collected by E. J. Brown in 1903 (not examined by author).

Heterodon contortrix Stejneger and Barbour, 1917:76.

• CONTENT. No subspecies are currently recognized. Platt (1969) concluded that variants designated as subspecies are not sufficiently distinct or geographically definable to warrant their recognition.

• DEFINITION. A medium-sized stout snake of the genus *Heterodon* characterized by a straight rostral scale, no accessory scales around the single median azygous plate separating the internasals, scale rows 23–25 and about 2 rows of gulars between chin shields and ventrals. There are usually 20–31 pale crossbars (varying in color among individuals) on the body alternating with lateral rows of dark spots. Various degrees of melanism are common. Maximum size recorded is 1155 mm (head-body length).

• DESCRIPTIONS. Many descriptions of adults are available, including those in Cope (1900), Wright and Wright (1957), Conant (1975), Platt (1969), and numerous state herpetological manuals. Cope (1900) described eggs, Platt (1969) dentition and hemipenes, and Weaver (1965) cranial anatomy.

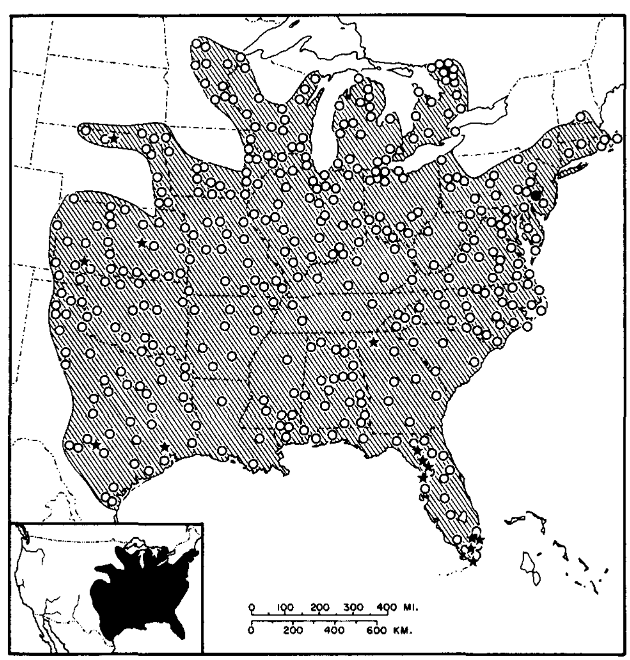
• ILLUSTRATIONS. Black and white photographs are in many publications including Wright and Wright (1957), Smith (1961), Anderson (1965) and Mount (1975). Color illustrations are in Behler and King (1979) and Conant (1975).

• DISTRIBUTION. *H. platyrhinos* occurs throughout the eastern half of North America from Massachusetts and the southern portions of New York, Pennsylvania, Ohio, Indiana, Illinois, and Missouri south to the Gulf Coast. Northward the species occurs locally in southern New Hampshire, western Pennsylvania, the peninsula of southern Ontario, northwestern Ohio, the southern peninsula of Michigan, northern Indiana, and much of the southern half of Wisconsin and central Minnesota. Westward the species reaches the forest-prairie border and extends westward along river valleys. In the southwestern part of the range it occupies eastern Texas to Fort Worth and, in locally favorable areas, the Edwards Plateau. Southwestern limits are in the Mesquite-Acacia-Savanna of the South Texas Plains (Platt, 1969).

• FOSSIL RECORD. Remains are known from two Upper Pliocene deposits and two Pleistocene deposits of the Yarmouth and Sangamon interglacial periods in Kansas, one Pleistocene (Nebraskan) deposit in Nebraska, two Pleistocene (Sangamon and late Wisconsin) deposits in Texas, one Pleistocene (Illinoian-Recent) deposit in Georgia, and nine middle Pleistocene to Recent deposits in Florida (Holman, 1958, 1959, 1963, 1965, 1967, 1969; Auffenburg, 1963; Brattstrom, 1967; Platt, 1969).

• PERTINENT LITERATURE. Accounts are available of natural history (Edgren, 1955; Platt, 1969) and behavior (Raun, 1962; Munyer, 1967), particularly death-feigning (Edgren and Edgren, 1955; Myers and Arata, 1961; McDonald, 1974), food habits (Huheey, 1958), egg-laying (Clark, 1952a, 1952b) and burrowing (Davis, 1946). Bragg (1960), McAlister (1963), Kapus (1964) and Grogan (1974) discussed potential toxicity. Anatomical topics include weight-length relationships (Kaufman and Gibbons, 1975), bicephalism (Nickerson, 1966), seasonal bimodality of length (Klau and David, 1952), cranial anatomy (Weaver, 1965), adrenal glands (Smith and White, 1955; Spaur and Smith, 1971), development of hemipenes (Clark, 1952c), umbilical scar (Edgren, 1951), eggs (Kennedy, 1961) and geographic variation (Edgren, 1961). Physiological studies involve body temperature (Kitchell, 1967, 1969), ecological energetics (Smith, 1976), bradycardia during death-feigning (McDonald, 1974), lipids of scent gland secretions (Oldak, 1976), serological relationships (Minton, 1976) and radiocesium concentration (Brisbin et al., 1974). Other topics include melanism (Edgren, 1957a), albinism (Van Devender, 1967), parasites (Anderson and Levine, 1961) and *H. platyrhinos* as a reservoir for eastern encephalitis virus (Karstad, 1961).

• NOMENCLATURAL HISTORY. Several species-level epithets have been applied to melanistic forms and local populations of this species having slight and inconsistent variations (particularly in the azygous scale). The name *Boa contortrix* probably originated from Linnaeus' confusion of *Agkistrodon contortrix* with *H. platyrhinos.* The type of *B. contortrix* of Linnaeus' 12th edition (1766) was described as having ventral and subcaudal counts outside the range of the hognose snake but within the range of the copperhead (Klauber, 1948). Edgren (1957b) presented arguments for relegating *H. browni* to the synonymy of *H. platyrhinos.*



MAP. Solid spot indicates the type-locality, open circles other records. Stars mark Pliocene and Pleistocene fossil sites.

• Etymology. The name *platyrhinos* (Greek: "*platy*" = broad, flat, and "*rhinos*" = nose) refers to the relatively flat, enlarged rostral scale.

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